

NAVY MEDICINE

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COVER: HMC(SW) Michael E. Bastin examines HM2 Kedra L. Scroggs at Naval Hospital, Bethesda. Caring for patients in a hospital setting is one way independent duty corpsmen are maintaining their skills between deployments. Story on page 11. Photo by HM3 Louis E. Curtis, Jr., NSHS, Bethesda, MD.

Blue Ribbon Panel

The Blue Ribbon Panel (BRP) on Navy medicine, chaired by the Vice Chief of Naval Operations, has reported to the Secretary of the Navy with wide-ranging recommendations to improve Navy health care delivery. The Secretary has approved the report in concept. This sets the stage for a long-sought initiative to recognize our need for growth and improvement in resources.

In this issue I have outlined the major findings of the BRP as they pertain to the operation of our facilities. The help this will bring to our people in being able to do their jobs efficiently and effectively is significant. At the same time it is clear that the budget environment of the years ahead will continue to demand getting the most for every Defense dollar spent. That means that we must get the most for every health care dollar spent, by bringing high-cost CHAMPUS treatment back into our facilities where we can provide care just as thoroughly and less expensively.

Cost-effectiveness is a clear objective for the future. The trends across the board in medicine are also clear. Health care costs are climbing at astronomical rates, far outstripping inflation and other factors in the economy. For government and military health care practitioners, this means that doing business better and doing more of it in-house are absolute necessities for viability in this budget environment.

The important thing to remember about the BRP's findings (see page 14) is that they represent a very significant commitment on the part of our line colleagues toward the improvement of health care delivery across our system. It is one of the most positive and encouraging developments which I have seen in Navy medicine in recent years. Its success depends upon the solid support of each one of us, something I know I can fully rely upon from you.

VADM James A. Zimble, MC

A look back: Navy medicine 1918



At U.S. Naval Hospital Puget Sound, WA, corpsmen transport food carriages to the wards.

The Corpsman's Corpsman

The independent duty corpsman (IDC) is one of the most versatile specialties within a highly versatile and talented rating. Whether at sea with the fleet, or operating with Fleet Marines, SEALs, or ashore in a clinical setting, the IDC is at the cutting edge of the corpsman's craft and at the leading edge of practice in the working environment of people in the combat forces.

Responsibility, long hours, the need to know his craft thoroughly, and to constantly update knowledge to the latest medical procedure are all hallmarks of the IDC's challenging job for the Navy and Marine Corps. In many instances the IDC is the corpsman on the scene whose diagnostic ability and quick thinking saves the day and saves a life.

No civilian equivalent exists for the IDC, just as no direct equivalent exists for many especially demanding jobs on the Navy-Marine Corps team. Numbered among the essential ingredients of the specialty are a high sense of personal dedication, seasoned maturity, and a persistence in the face of a diverse range of responsibilities.

In this issue of *Navy Medicine*, we feature the stories of IDC's in a range of assignments, which are among the most demanding in the Medical Department. It is a good opportunity to give credit and deserved appreciation to a superb part of a superb organization. At the same time, those in command assignments should be mindful of the need to fully support our IDC's in the important areas of training and certification, and in the fullest use of their substantial talent and knowledge in our medical treatment facilities. IDC's provide one of the most important sources of input to the Physician's Assistant Program, and we must support as well their professional progress toward that goal.

RADM H. James T. Sears, MC



Hatches battened down, awaiting Gilbert's arrival

Department Rounds

Disaster Planning During Hurricane Gilbert

Disaster planning is an intricate function of all naval hospitals and clinics. The Navy medicine motto, "We Stand By Ready to Assist," was never more prevalent than on 13-16 Sept 1988. The eyes of the nation turned to South Texas as Hurricane Gilbert, one of the mightiest storms ever in the Caribbean or the Gulf of Mexico, bore down on Corpus Christi.

Positioned right on the Gulf Coast, Naval Hospital, Corpus Christi maintains a constant vigil regarding the formation and presence of hurricanes. The Naval Air Station (NAS) maintains a Condition V readiness throughout the hurricane season (Condition V is a major storm that can strike the base within 96 hours). On 13 Sept the base and the hospital shifted into Condition IV.

Tuesday—13 Sept

A nervous tension pervaded the hospital. Hurricane Gilbert's winds approached 150 mph with gusts to 175 mph and had been categorized as a Class V hurricane, the highest category. NAS issued a request concerning verification of the hospital's readiness.

The hospital is responsible for providing medical support for over 6,000 active duty and dependent personnel at five main disaster shelters and seven secondary disaster shelters. Disaster teams were rechecking their carts and bags to ensure all necessary equipment was operable and supplies ready. CAPT R.B. Gutshall, commanding officer of the facility, met with directors and department heads to keep them informed of current situations.

Wednesday—14 Sept

With Gilbert still raging toward the South Texas coast, tension was now as thick as molasses. Corpus Christi hadn't seen a hurricane of this magnitude since Hurricane Celia in 1972. Panic had already set into the civilian community. Due to the seriousness of the storm, the hospital was contacted by the Naval Medical Command, Southeast Region, and informed that emergency supplies and teams from

other naval hospitals were standing by, if needed.

CAPT Gutshall made the decision, in conjunction with other base commanding officers and the area coordinator (Chief Naval Air Training), to secure civilian employees at the end of the workday until the storm passed. A critical decision was made by the NAS commanding officer, CAPT Craig Reynolds, to evacuate all nonessential active duty personnel and dependents to inland areas. Lackland Air Force Base in San Antonio offered 2,000 beds to NAS evacuees and their families. This had a dramatic effect on disaster planning for the hospital because it deactivated many, if not all, of the emergency shelters.

At 1300 the hospital went into Condition III (hurricane conditions may strike within 48 hours). As the Command and Control Center was activated, an emergency call came in from the Corpus Christi State Hospital for the Mentally Retarded requesting litters to evacuate patients. Once again the hospital assisted.

Because the hospital was to be the principal shelter site, questions were raised about the emergency sheltering for unexpected specialty groups (i.e.,

discipline barracks personnel, brig detainees, etc.). Questions were also raised about establishing an effective meal schedule for all the active duty and dependent personnel. These problems and many others were solved in a timely fashion.

Thursday—15 Sept

As Gilbert moved across the Yucatan Peninsula, it was downgraded to a Class III hurricane. Packing winds up to 120 miles per hour, Gilbert was still a deadly storm. At 1045 the base was placed on Condition II status. Additional medical support was to be provided to the NAS Emergency Operations Center, Security, and the Corpus Christi Army Depot barracks. Recall of personnel scheduled to stand duty for the next 3 days was implemented. Working parties were busy moving equipment, supplies, and furniture to other areas of the hospital. Extra water cans were obtained and filled, in the event of loss of water pressure. Sandbags were filled to prevent the possibility of flooding. Cots and mattresses were distributed to accommodate excess personnel being sheltered throughout the hospital. Window and door shutters were

Emergency room crew standing by.





Hospital hallways were used as evacuation areas.

installed to prevent glass breakage during the storm. During this time over 480 evacuees and staff were processed and billeted as they entered the facility. It was a very long, hard, and trying time.

However, the ultimate problem was the preparation and service of food. A monumental task lay ahead for a facility that was accustomed to serving 190 persons per day (on a very good day). Overnight that number increased to 1,440 meals per day. To add to this chore, there was a deficiency in knowledgeable food service personnel. Contract workers were evacuated due to the severity of the storm. Food preparation had to be performed with the aid of alcohol rehabilitation patients, discipline barracks personnel, hospital staff personnel, and the outstanding support of staff spouses and dependents. Not only were delicious hot meals regularly served, but special diets for our inpatients were also provided. At 2000, Condition I was set; the arrival of Hurricane Gilbert was possible within 12 hours. Hurricane doors were secured, and we battened down the hatches to await Gilbert's arrival.

Friday—16 Sept

As daybreak came, it was becoming increasingly evident that Hurricane Gilbert's landfall would be south of Corpus Christi. The prime target area was estimated to be near Brownsville, TX; however, the hurricane still could have turned northward at a moment's notice. To ease tension in the facility, the education and training staff showed cartoon movies to calm the children. The hospital staff mustered in the aviation physiology training unit's auditorium for working parties. General upkeep of the facility was mandatory for the 480 evacuees and staff members; maintenance and janitorial service still had to be performed.

At 1700 Gilbert made landfall approximately 150 miles south of Brownsville. NAS experienced some heavy rain, gusty winds, and high tides. By most accounts the evacuees thought the worst was over and wanted to return to their homes. However, this was one of the most dangerous times. Two tornadoes touched down on NAS, destroying a carport, knocking down power lines, and inflicting some damage to the Child

Care Center. Over the loudspeaker, CAPT Gutshall and CAPT Reynolds requested the evacuees' assistance on remaining within the safe confines of the building until Condition V (normal state of readiness) was set. Things settled down and the disaster team met to discuss when Condition V would be set.

Saturday—17 Sept

Hurricane Gilbert was downgraded to a tropical storm. The storm spawned many, many tornadoes all over South Texas. At 0830 an announcement was made that Condition V would be set at 0900. Work parties proceeded to restore the building to its original state, and by 1100 all evacuees and off-duty staff personnel left the hospital.

Overall, personnel in the Corpus Christi area will probably say we received the best weather in South Texas. Although Hurricane Gilbert did not turn out to be as tremendous a threat to the Corpus Christi area as predicted, it did provide us a means to test our readiness plans for destructive weather.

As disaster planner for the Naval Hospital, Corpus Christi, I must say this was truly an experience. I witnessed the ultimate in dedication, support, and camaraderie of the hospital staff, base personnel, and dependents during very trying times. A Bravo Zulu must go to all personnel who participated in food preparation and services for the hospital. An equally justified Bravo Zulu goes to our branch clinics in Beeville and Kingsville, TX, for their efficient, well organized, and excellent support to Naval Air Stations Beeville and Kingsville. Thanks must also go to the Naval Medical Command, Southeast Region, and all naval hospitals and personnel who stood by and were ready to assist. Hurricane Gilbert was a mighty storm, one of which we hope never to see the likes of again, and one which will never be forgotten. □

—Story by LTJG Brent A. Haynie, MSC.
Photos by HMI Francis J. Passalacqua, Naval Hospital, Corpus Christi, TX.

First Female IDC Delivers Health Care

HMC Cherie Kildow pioneers a Navy program that is expanding the role of women in the armed forces and also delivers medical care to remote bases in the continental United States.

On call 24 hours a day, making diagnoses, treating patients, performing limited laboratory procedures, and maintaining administrative duties are the normal course of work for any sea-duty independent duty corpsman (IDC). However, for Chief Kildow these duties are most extraordinary.

Kildow is the first female IDC, but unlike all other IDC's she is not assigned to a ship. Instead, she works out of the newly reestablished Branch Medical Clinic at the Naval Facility,

Centerville Beach, CA.

The small remote Naval Facility, about 300 miles north of Naval Hospital, Oakland, did not have a medical staff. The unique solution to the absence of a Navy medical staff was the establishment of an IDC position at the base.

"Before, I was just typing bills and acting as a bill collector," remarks Kildow. "I couldn't see anybody without a doctor on base. Whenever anybody came in for sick call they had to be sent to a civilian doctor. I could not function in my rate here."

Things changed quickly for her when a new commanding officer took charge of the Naval Facility. "As soon as CDR J.C. Reid came on board he

made medical care a major priority," Kildow recalls.

CDR Reid sought to give Kildow the same responsibilities she would have had had she been on a ship. As a result of his efforts, she became the first female IDC and the first IDC to practice while on shore duty in the United States. Kildow is also the first IDC—male or female—to be credentialed in the continental United States.

"I really feel the pressure is on," she says. "The program is an experiment. If I fail, the program dies. If I do well, then other IDC's will be able to see patients throughout the United States. So I am under close scrutiny and am working very hard to succeed for the others who can benefit from this program."

The chief points out that previously, regardless of how minor the medical need, anybody on base needing medical attention had to be sent off base to the civilian community. "It was inefficient before Kildow became a credentialed IDC," says ENS Cecile Powell, an officer at Centerville Beach. "If you were sick you went to the chief who could only certify that you were sick, and then it was off to town."

When Kildow assumed her duties, she immediately won Navy medicine some newfound respect at Centerville Beach. "She's the backbone of the clinic," explains Seaman Annie Kraft, administrative assistant for the branch clinic. "She's a compassionate and caring person, but if she thinks you're being a 'skate' she'll let you know that too."

Airman Deborah Davis



HMC Cherie Kildow with her clinical assistant HM3 Dan Carney.

However, Kildow doesn't just work sick call. She is on call 24 hours a day. When not on call, she must also run the branch clinic's administrative and military functions. Consequently, Kildow isn't merely an IDC, she's a one-woman branch clinic.

"In addition to my IDC duties, I have to perform all the duties required in a branch clinic. There are safety and preventive medicine programs, first aid training, and general military training lectures."

Kildow realizes the unique learning experience the assignment has afforded her. The contracted civilian doctors not only provide medical care to patients, but they also oversee her treatment of patients and help train and sharpen her skills.

"We let her assist in surgery and with other procedures," says Dr. Olkin of nearby Fortuna, CA. "We've had 10 years' experience training nurse practitioners, and we're in a special situation to help Chief Kildow."

An interesting aspect of the chief's job is her dual capacity as IDC at Centerville Beach and head of the branch clinic. Consequently, she must answer to two commanding officers: CDR Reid of the Naval Facility and CAPT H.H. Sowers, former commander of the Naval Medical Clinics Command, San Francisco, CA.

As a CONUS IDC, Kildow can put to work the months of schooling she had at San Diego and the training she went through under the Medical Clinics Command, San Francisco. Having taken care of patients here in the continental United States, Chief Kildow now looks forward to her next duty station.

"When my duty ends here at Centerville Beach," she says, "I'd love to be stationed in the Antarctic." When asked why she would want to go to one of the most isolated bases in the Navy, she responds, "I'm in the Navy. This is an opportunity to do things I could never do and see things I could never see. Why shouldn't I take full advantage." □

—Story by Jonathan Arnowitz, Naval Medical Command, Northwest Region.



Features

Sub Doc



PHC/AC C.L. Stover

USS *Ulysses S. Grant* (SSBN-631)

made sure that he was breathing and checked his pulse.

"How do you feel lieutenant?" I asked.

"I . . . I . . . fell down the ladder, Doc . . . my arm . . . it hurts . . . God it hurts," he moaned.

"Can you feel this?" I asked as I lightly touched his fingers.

"Yes . . . but it hurts. My whole arm from the elbow down hurts."

"Can you move your fingers?" I inquired as I looked closer at the cut on his head.

"Yeah . . . I can move them alright, Doc, but it hurts . . ."

Pulling a dressing out of my first aid bag, I applied pressure over his right eye. He would probably need some stitches; the wound looked fairly deep.

"How bad is it?" LT Kelly asked as he touched his forehead realizing that he was bleeding.

"Not too bad; it's nothing I can't handle. Are you hurting anywhere else?"

"No, just my arm . . ."

"I'm going to sit you up and put a sling on that arm. Do you think you can handle that?" I said, hoping that he wouldn't get dizzy.

"You're the Doc. You tell me what to do." LT Kelly answered in a perkier voice.

Carefully examining the lieutenant and evaluating the situation, I concluded that he had no neck or back injuries, and his vital signs were stable. He had a 7 cm laceration over his right eye and a possible fracture of the olecranon process of the right elbow. He'll need some stitches, and a splint on his right arm.

"How is he, Doc?" asked the XO as he walked toward us.

"I think he's gonna be alright. I'd like to check his arm thoroughly and sew the cut on his head. He'll be fine, I'm sure." I motioned to the emergency medical assistance team (EMAT) to

"The Doc, get the Doc," cried Josephs, in a near state of panic.

"I'm here Josephs, calm down now, everything will be all right."

Adrenalin started pumping all through my body as I looked down at

LT Kelly. He was our weapons officer and a very popular guy, but right now he was lying on the deck of the Missile Compartment, injured and in need of my help. LT Kelly's arm was clutched across his chest, blood ran freely from a large cut over his right eye. I quickly

take LT Kelly to sickbay.

"Good job, chief!" the XO said, smiling.

Walking back to sickbay, I couldn't help remembering my first day on this boat. I was fresh out of school, a hard charging first class hospital corpsman, eager to put into use what I had learned at the Naval Undersea Medical Institute (NUMI). It was the most challenging and important year of my life. At NUMI, I was prepared to face and handle all the responsibilities and challenges of an independent duty hospital corpsman. The corpsman I was relieving, HMC Brown, met me topside and gave me a quick tour of the boat. Throughout the tour I was amazed by the closeness and camaraderie of the crew.

Chief Brown reconfirmed what I had learned at NUMI. I was not only the boat's medical department representative, but also the radiation health officer, responsible for overseeing the occupational and environmental health programs, industrial health, atmosphere control, and the part I liked best, diving medicine.

Initially the magnitude of the responsibilities had me worried, but I soon realized that the training I received had truly prepared me for this job. The support I got from the other submarine, group and squadron corpsmen, was invaluable. It's nice working in a close-knit community, where people care about each other.

Watching the EMAT helping LT Kelly onto the exam table in sickbay, I felt proud. The EMAT consisted of several guys from different rates. I had picked and trained them to assist me in medical emergencies.

"How're you doing lieutenant?" I asked as I removed the dressing from the wound.

"I'm okay, Doc," he said. "Do I need any stitches?"

"Looks like you'll need a few," I answered.

"Well, you're the Doc, do what you have to."

I cleaned the wound, numbed the skin, and put in seven sutures. There was no evidence of a concussion. His

arm didn't appear to be broken; it was just a bad bruise. I gave him instructions to keep ice on his elbow for 24 hours and favor it for a couple of days.

"I want to see you tomorrow, sir, so I can check your arm. I'll take out the stitches in about 5 days."

"Thanks, Doc, you're great!" LT Kelly said as he left sickbay.

I made an entry in the Medical Department Journal, and walked up to the CO's and XO's staterooms to brief them on LT Kelly's condition.

On the way, I realized how much I'd miss this boat and her crew. This was my first boat and was something very special to me. I earned my dolphins here. I know her better than my own house. I remember that we were underway when the message came in with the results from the chief's board. She's a good boat. She's been good to me; she helped me make chief and to grow personally and professionally.

I walked into the XO's stateroom. "Good morning, I just stopped by to brief you on LT Kelly's condition," I said.

"Okay, Doc. Let's go see if the captain is available."

We stood outside the captain's stateroom.

"Captain, the corpsman is here to brief us on LT Kelly's condition," the XO said.

"Sure, come in Doc. How is LT Kelly?" asked the captain.

"Well, sir, he has a 7 cm laceration over his right eye. I've sutured that. He doesn't appear to have a concussion or neck injury. His right arm is not broken; it's only a bad bruise on the elbow. He should be fine, I don't think he'll have any problems."

"That's good, Doc. Is there anything else that I need to know about?" the captain asked.

"No sir, captain, everything is fine."

"Okay Doc, you can go. Let me know if LT Kelly's condition changes, or if you need anything."

Reflecting on the privileges that my job offered, as I walked back to sickbay, I felt luckier than most. I'd made the right decision when I'd joined the Submarine Force. After all, I became

one of the few that had direct access to the CO and XO any time I needed them. I started running my own shop and setting my own hours. I was my own boss.

A few days later, after we had pulled into port, I was sitting in sickbay filling out medical supply requests.

"Man overboard, port side!" The IMC blared. I was off like a shot, heading topside, just in case I was needed.

"Get Doc! Somebody get Doc!" someone shouted.

I pushed my way through the crowd and reached the edge of the deck. The crewmen had just pulled the man out of the water. I immediately bent over to check on him.

"How are you, guy? Are you alright?" I asked.

To my surprise, I realized that the guy was a girl.

"Get me some blankets, quick!" I yelled. "Let's get her up to the tender and get her treated."

"I'm okay," she said. "I just want a good hot shower."

When I was sure that she was uninjured I returned to the boat to finish ordering my supplies. I later found out the woman was attached to the sub tender, the one we were tied to. She had been working on the deck of our boat at the time of the accident.

I sat on the deck of the submarine, waiting for my relief to arrive. It was a magnificent midwinter day. The Sun was shining, the sea was calm, and the seagulls soared like kites in the sky. It was a perfect end to a perfect tour. I'd accomplished all that I'd planned.

Why is this job so special? Why is it so satisfying? What makes it all worthwhile? It's not the sea pay; it's not the sub pay or the independent duty pay. It's that special feeling you get when a shipmate, who you've nursed back to health, looks at you and says, "Thanks, Doc." □

From the journal of HMI(SS) John Baitinger, edited by Katerina Baitinger.

HMI Baitinger serves aboard USS *Ulysses S. Grant* (SSBN-631). When in port he and his wife, Katerina reside in Groton, CT.

Major Changes on the Horizon

Transformation of the IDC

LCDR Thomas F. Hilton, MSC, USN

During the first week of March the Surgeon General (SG) VADM James A. Zimble, MC, convened a special conference to produce a document that will very likely transform the independent duty corpsman (IDC) community. Over 40 Medical Department officers and chief petty officers participated in the conference. Included were representatives from OPNAV, Headquarters U.S. Marine Corps, Office of the Inspector General, NAVMEDCOM, fleet and force commanders, geographic commanders, Naval Health Research Center, San Diego, the Health Sciences Education and Training Command (HSETC), and the Naval School of Health Sciences. VADM Zimble, RADM Joseph S. Cassells, MC (COM-NAVMEDCOM) since retired, and RADM-selectee Robert B. Halder, MC (NAVMEDCOM-02), each visited the group to offer their suggestions and support.

The draft of the OPNAV instruction produced by the "PQS/IDC Conference (Phase II)," redefines the IDC's role both at sea and ashore. At sea, IDC's will be more closely allied with their warfare communities than ever before. Ashore, IDC's will be used principally as nonphysician health care providers which will help to sustain their clinical skills between sea tours.

IDC Conference Challenges

In convening the IDC conference, the SG made it clear that IDC's were to be given treatment responsibilities ashore commensurate with their responsibilities at sea. He directed that fixed medical treatment facilities (MTF's) ashore recertify and sustain the clinical knowledge, skills, and abilities (KSA's) of IDC's who were between operational tours.

The SG's charge posed a challenging "dual-environment" dilemma for conference members. In the shore-based environment, IDC's must function within the limits of national standards for health care providers. However, when in the operational environment, IDC's must be prepared to provide health care services normally reserved for physicians. To further complicate matters, each fleet and force has exercised somewhat differing limits on both the scope of care and the treatment guidelines IDC's must follow.

To achieve solutions to such problems required standardizing many aspects of the health care provided across fleets, forces, and the geographic regions of the world.

Furthermore, standardization could not compromise quality of care nor hamstring the flexibility needed to meet widely differing operational missions and conditions.

Presented here are some highlights from the new NAVMEDCOMINST 1510.6, entitled "Training, Certification, and Use of Independent Duty Hospital Corpsmen (IDC's)." The former Vice CNO ADM J.B. Busey approved the document's principal elements, and forwarded it to VADM Zimble for final review and issuance as an OPNAV instruction. Since then, it has been decided that the reorganized NAVMEDCOM, headed by RADM H. James T. Sears, MC, should issue the instruction as a directive applying to all Navy and Marine Corps units, much like a systems command instruction.

Definition of an IDC

The title "Independent Duty Corpsman" was previously reserved for surface ship and submarine enlisted members who served independent of a medical officer as Medical Department representatives. NAVMEDCOMINST 1510.6 redefines the IDC community to include all operational roles in which hospital corpsmen function independent of a medical officer.

Henceforth, an IDC will be defined as a hospital corpsman who has successfully completed Advanced Hospital Corps School (AHCS) or equivalent training and who is certified to perform clinical duties independent of a medical officer. This includes IDC's serving aboard submarines (HM-8402), surface ships (HM-8425), special amphibious reconnaissance (proposed NEC HM-8403/5345), special operations (HM-8491/532X), and deep sea diving teams (HM-8494). Furthermore, IDC's may also be assigned to independent duty ashore at some MTF's units of the operational force, or isolated or geographically remote duty stations where no medical officer is assigned.

Scope of IDC Clinical Duties

In the past, many IDC's were unsure about the extent of their responsibilities.(1) NAVMEDCOMINST 1510.6 will go far in reducing that uncertainty. It details the scope of care IDC's are to provide, specific clinical skills that they must maintain, and the medications that they can dispense. These definitions will help to standardize IDC training across NEC's. They should also identify KSA's required for IDC continuing medical education and recertification.

Navy QA/RM experts offered invaluable help. They ensured that the newly proposed procedures were both consistent with Navy standards of care and met medical supervisory requirements for maintaining MTF accreditation. In addition, to accommodate the changes in IDC policy established by 1510.6 the SG's office is also reviewing OPNAVINST 6320.7 which sets QA policies for forces afloat.

Certification/Recertification

The IDC Personnel Qualification System (PQS) was originally implemented to help maintain and certify corpsman medical readiness at sea. However, limitations in the scope of medical conditions typically encountered aboard ship hindered the success of PQS by causing some clinical KSA's to get rusty. Moreover, most shore assignments did not provide IDC's with sufficient supervised clinical experience to regain seldom-used KSA's. Therefore, the IDC conference consensus was that clinical certification/recertification could be better accomplished through a formal program at MTF's ashore than through a PQS program at sea.

This is the way certification/recertification will work. All IDC's are certified ready, both medically and clinically, upon graduation from AHCS or its equivalent at the Nuclear Undersea Medical Institute (NUMI). Upon return to shore duty, IDC's will undergo a period of about 90 days clinical recertification at their MTF. The recertification period will enable IDC's to restore deteriorated KSA's before assuming significant patient care duties. Recertification will be supervised by a medical officer and an experienced senior IDC. It will include specific clinical rotations at a Navy hospital, if necessary, to upgrade KSA's that have declined from lack of use in the fleet.

Following recertification, IDC's will participate in continuing medical education while functioning as nonphysician health care providers. When IDC's receive PCS orders to return to independent duty, their MTF's must certify to NAVMEDCOM their medical readiness for an operational assignment.

Studies conducted during the past several years have shown the IDC school curriculum to be sound.⁽²⁾ The IDC schools will be guided by the treatment procedures issued by NAVMED P-XXXX. The content and duration of IDC training for submarine and surface IDC's will remain much the same as it is at present. Refresher training (REFTRA) will continue to be a requirement, but only when enroute from shore to PCS shipboard assignments. REFTRA's focus will shift primarily to occupational health and fleet/operational administrative topics. This is because MTF's will have the responsibility for recertifying IDC clinical readiness.

The situation with respect to the new IDC communities will differ considerably from the older, established IDC communities. Most corpsmen assigned to special operations teams have not had the benefit of the extensive

training provided ship and submarine IDC's. Nevertheless, at times many must also function independent of a medical officer. From now on, corpsmen entering the IDC community through the Special Forces and diving communities will undergo more intensive medical training. This training will help to ensure that all IDC's have the same clinical KSA's.

IDC Career Development

In the past, IDC career paths have been rather ambiguous. Completion of AHCS did not even guarantee assignment to independent duty.⁽¹⁾ Moreover, following completion of an independent duty tour, a great many IDC's never again served in primary care roles.⁽³⁾ For these reasons, perhaps the most significant impact of NAVMEDCOMINST 1510.6 for the individual corpsman will be in the area of career development.

Career pipelines for all IDC's are being constructed to assure that they are employed primarily as health care providers ashore. The second major IDC billet scrub in 3 years has been completed. Its purpose was to ensure that billets provide IDC's adequate clinical utilization to support the new NAVMEDCOM requirements. The scrub resulted in conversion of about 100 shore billets to quad zero (NEC 0000). In addition, a number of IDC billets will likely begin to migrate away from large teaching hospitals to smaller fleet support MTF's. The scrub will also bring squadron and group medical departments up to full strength. Both actions will more closely ally IDC's with their warfare communities.

From now on, being an IDC will mean being a fleet sailor and maintaining a high degree of medical readiness. Immediately following initial certification from AHCS, IDC's will serve in their first fleet utilization tour (sea duty). During periods ashore, IDC's will recertify clinically and remain clinically ready for operational reassignment. To remain certified, IDC's below the rank of master chief will be expected to return to operational billets following their shore utilization tours. In addition, IDC's must participate in continuing medical education programs when at sea as well as ashore.

NAVMEDCOMINST 1510.6 acknowledges that it is not possible for all corpsmen to serve as an IDC throughout their Navy careers for two primary reasons: (1) insufficient numbers of senior IDC billets, and (2) the gradual loss of IDC's because of personal and career requirements. During the next year or so, a number of corpsmen may lose their certification due to excessive time away from provider roles.

The Navy will provide alternative roles and NEC's such as the proposed HM-8424 "Medical Administrative Corpsman" as a way to utilize the knowledge and experience of corpsmen who no longer qualify for an IDC NEC. The intent of this new NEC will be to capitalize on this extensive fleet administrative knowledge and experience to make up the core of an NEC expected to grow to

some 800 billets. At first, few corpsmen without IDC training and experience are likely to be eligible. It will take awhile for HSETC to develop a "C" school for 8424's. After training becomes available, HM2's and above may apply to become 8424's.

Utilization Ashore

As stated before, many IDC's have served in billets that did not utilize or sustain IDC clinical KSA's. The practice of assigning IDC's to jobs such as hospital security force, warehouse supervisor, or administrative chief should stop. If commands cannot keep their IDC's certified, they will risk losing their IDC billets.

NAVMEDCOMINST 1510.6 states in the plainest possible language that IDC's must be assigned duties "primarily comprising clinical functions . . ." The instruction defines "clinical functions" to be primary patient care. The instruction does permit involvement in duties of an administrative or training nature. It, in fact, reminds commands that exposure to such duties is a necessary part of managerial and leadership development.

Once recertified, IDC's will be supervised "indirectly" by a medical officer working in conjunction with the Staff Education and Training Department. Indirect supervision consists of ongoing collaboration and periodic medical review of a sample of each IDC's patient records. To promote professional development and clinical readiness, IDC's must complete annually a minimum of 24 hours of continuing medical education approved for IDC's by NAVMEDCOM. Additionally, MTF's are to "mainstream" IDC's into grand rounds and other training evolutions available to medical staff.

Under the new NAVMEDCOM instruction some IDC's will experience expanded treatment authority and responsibilities. All IDC's will have expanded authority to administer medications. A list of medications will standardize Navywide the drugs which IDC's can administer ashore in a clinical setting. This authority will enable IDC's to maintain their skill and understanding of the appropriate use of medications they may use at sea.

Utilization at Sea

Shipboard IDC's will continue to function much as they have in the past. IDC's currently on ships and submarines will not experience much change. However, special operations IDC's will likely see a gradual shift of priorities to permit greater involvement in medical roles.

The subject of accountability for clinical care has long been an anxiety provoking topic among IDC's.(4) The conference made an effort to correct that. The new instruction specifies more precisely than before what types of clinical care are expected of IDC's. Gone are vague references to the "sick and injured among the crew." In their place are lists of specific conditions for which IDC's are certified to treat. The instruction importantly acknowledges that circumstances can occur which go beyond a

corpsman's treatment certification. It states that in dire circumstances IDC's can only be expected to provide compassion, reasonable comfort, and care to the utmost of their abilities.

Transformations Past and Future

It may sound trite to say that the IDC community has come a long way, but it is true. IDC's themselves laid the planks for NAVMEDCOMINST 1510.6. It is the IDC's who convinced the Navy to put computers in sickbay, provide responsibility pay for IDC duty, change detailing practices, and a host of other recent changes. IDC's Navywide have contributed considerable time and effort to provide researchers facts to analyze and report to NAVMEDCOM and the fleet. Master and senior chief IDC's from all over the Navy have participated in a constant stream of conferences and meetings to produce policy benefiting the IDC community. It has been the IDC's themselves who have transformed their own community, and it is a job well done.

It is important to understand that the changes formalized by the new NAVMEDCOM instruction will continue the transformation process that began with the IDC PQS initiatives of 1983. Thus certain features of the IDC program will evolve gradually, especially ashore. It is likely to take an interval of 18-24 months before Navy medicine will have all the IDC initiatives in place.

One aspect of being an IDC that won't change is the amount of intrinsic reward derived from the job. Being an IDC is perhaps the singlemost challenging and responsible job an enlisted member can have. It is definitely not for everybody. It requires a high degree of maturity, an inexhaustible supply of energy, acute judgment, and a willingness to keep learning every day. The rewards for being an IDC extend beyond responsibility pay and promotions. Certainly alleviating the pain and suffering of others is very rewarding. However, my personal observation has been that one aspect of being an IDC stands above the rest. That reward is the self-esteem derived from doing well a difficult and challenging job, **all on one's own.**

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Results of the Blue Ribbon Panel

VADM James A. Zimble, MC, USN

The recently concluded study by the Navy Blue Ribbon Panel (BRP) on medicine is one of the most far-reaching and important steps in our continuing effort to restore Navy medical capability. Because of its enormous potential for beneficial results, I want to share with you the major provisions of the BRP, and my thoughts about what it means for us. In many ways, it marks the first day in the rest of the life of Navy medicine. It will be a major influence on the future of our health care and combat care capabilities in the years to come.

This report and the clear commitment from our line colleagues to become active partners in fixing Navy medicine is the brightest and most encouraging initiative I have seen since becoming Surgeon General a year and a half ago. There are several areas of essential change which we must realize and accept. The months and years ahead are times of change . . . it will not, repeat not, be business as usual. We cannot have the benefits of change without changing the way we do things ourselves. This means that everyone in Navy medicine has a role in our future, and that each of us are instruments of change. Outside influences will make only part of the difference. In the final analysis, the difference will come *where it always has*, in the patient-provider relationship at the individual level. At the same time, the dramatic improvements which are necessary at the highest levels of command will continue to receive my detailed personal attention and that of everyone in a leadership position in Navy medicine. The stakes for Navy medicine, the Navy and Marine Corps, and the security of this country are too high for any of us to leave anything to chance.

Before describing the major issues, findings, and recommendations of the BRP, I would summarize them by saying that they demand improved management and our increased accountability for personnel and dollar resources, an absolute maximum effort to reduce CHAMPUS costs by returning patients to our hospitals, and increased teamwork with the line Navy and Marine Corps on all aspects of health care delivery.

First, some background. In May 1988, amid continuing reports of a crisis in health care delivery, the Secretary of the Navy established the BRP on Navy medicine chaired by the Vice Chief of Naval Operations. This panel included the Assistant Secretary of the Navy for manpower and

Reserve Affairs, the Navy Surgeon General, the Deputy Chiefs of Naval Operations responsible for logistics, financial management and manpower, a senior Marine Corps representative, and a prominent civilian physician.

For 5 months the BRP examined Navy medical care in detail and looked for the root causes of our problems. After careful study and analysis the panel recommended specific, well-defined, realistic actions to overcome these problems. The recommendations, some of which have already been accepted and implemented, include major, necessary changes in the way Navy medicine is organized and in the way we do business.

The 76 specific issues cited in the BRP report are within the framework of six general conclusions. These set the background and limits against which our future initiatives must be measured:

- **Navy medicine must focus on increasing its in-house capability through optimal use of existing Navy hospitals and clinics.** This will reduce CHAMPUS costs, an extremely important goal, and will also improve wartime readiness. There is clear recognition of the need for additional support personnel to make providers more effective and place administration and support responsibilities where they belong . . . with administrative and support personnel.
- **Navy medicine must assign Graduate Medical Education (GME) top priority.** GME remains the foundation of Navy medicine. It must receive first priority manning for the Navy's top physicians and other providers, even at the expense of fully meeting all operational and overseas requirements. A full and vigorous GME program safeguards both peacetime and wartime capability. Recognition of this fact by the BRP is encouraging evidence that their study has brought them to an essential understanding of how Navy medicine must really work.
- **Navy medicine must develop measures of effectiveness.** Navy medicine presently has no means to measure individual or aggregate hospital or clinic performance. We must develop and implement clear criteria, establish a baseline, set annual goals, and track progress. This is an unquestionably necessary management improvement which is essential if we are to justify dollars, facilities, and people in the year ahead.

- **Budget realities preclude adding unlimited dollars and end strength.** Every initiative to improve Navy medicine must ensure cost-effective solutions. Budget constraints now and for the foreseeable future preclude solving problems by simply adding additional resources without full appreciation of a return on that investment.

- **The Navy must document and communicate meaningful improvements in Navy medicine.** We must develop a more accurate perception of the Medical Department within the Navy. We must actively demonstrate to the Medical Department, sailors and marines, patients, and the Congress that substantive changes are occurring as a result of BRP initiatives. This will be a particular responsibility of every officer in command at the local level, and for COMNAV-MEDCOM and me to do at the Washington level.

- **Maintain the BRP and flag officer working group.** While some BRP initiatives are already implemented, many will not be for 6-9 months. The membership of the BRP will monitor these regularly as a standing OPNAV medical review board. The specific recommendations of the BRP fall into 14 categories listed below:

1. Organizational Structure Consolidation

- Replace the current geographic command (GEOCOM) system with medical type commands (MEDTYCOM's), to improve resource allocation and line involvement. This will mean that CINCLANTFLT and CINCPACFLT will each have a major role as a claimant for health care resources and powerful responsibilities for health care services.
- Disestablish the four CONUS multiclinic commands and return the financial and manpower assets to Navy medical treatment facilities. This will reduce overhead, better support the GME effort, and provide improved flexibility to teaching hospital commanders.

2. Graduate Medical Education

- Assign GME top priority for personnel and resources, since it is the keystone which supports the entire voluntary military medical structure for quality health care delivery in peace and war. Our requirements for overseas and operating forces continue as high priorities and are recognized for their front-line importance.
- Immediately establish a rapid implementation team (RIT) of officers with the best innovative abilities and experience to undertake a pilot initiative to identify and enhance management efficiencies.
- Combine National Capital Region and Naval Hospital, Bethesda, reestablishing the National Naval Medical Center. Assign a flag officer, who will lead the RIT, as commander.
- Establish personnel policies to properly man GME facilities.
- Develop compensation packages to attract and retain our best clinicians and teachers.

3. Management Effectiveness

- Establish a decision support system (DSS), using medical performance indicators, to permit a responsive, organized, and consistent approach to resource management. Simply stated, we must find better ways of managing, handling, and accounting. Only then can we truly justify our requirements and succeed at the programmer's bargaining table.
- Implement measures of effectiveness throughout Navy medicine.
- Establish management assist teams to visit treatment facilities and help local commanders implement their use of these performance indicators.

4. Compensation for Health Care Professionals

- Develop a competitive medical special pay package that targets pay to the health care specialties that are most underpaid relative to their civilian counterparts and encourages multiyear commitments at critical career decision points.

5. Personnel Utilization

- Revitalize the medical detailer/placement function to match the right person with the right job and prepare individuals for command and key management positions.
- Revise treatment guidelines and training to improve employment of all health care personnel.
- Create a formal "command development" process by articulating leadership/management skills and developing training requirements.
- Establish career paths for leadership positions which allow personnel to acquire needed experience and training.
- Expand the Physician's Assistant (PA) Program and approve commissioning PA's in the Medical Service Corps.

6. Contracts

- Conduct a contract management training program.
- Program contracts for clinical and administrative support to enable the best use of our health care providers and increase the capability of our facilities. Increase the contracting program from zero in FY87 to more than \$350 million in FY92.
- Fully execute the programmed contracts so that they provide the highest payback.

7. Medical Accession and Retention

- Add medical personnel to CNO retention teams and visit medical facilities.
- Increase the number of medical department recruiters.
- Open NROTC scholarships to nursing programs.
- Ensure physician applications are processed efficiently.
- Encourage medical school quotas from NROTC as well as the U.S. Naval Academy.

- Increase the number of medical clerical and administrative personnel.

8. Command and Control Authority

- Assign Commander, Naval Medical Command (COMNAVMEDCOM) as Deputy Surgeon General to avoid divergent, redundant, or ambiguous direction to the field on medical issues.
- Transfer redundant functions of two directorates from the OPNAV staff to NAVMEDCOM, utilizing double-hatted staff.
- Assign the existing four Deputy Directors as Assistant Surgeons General to strengthen the position of the Deputy Surgeon General.

9. Medical Training System

- Lengthen basic hospital corpsman school from 10 to 14 weeks to provide improved training.
- Increase attendance at HM "C" schools to alleviate the shortage of skilled support personnel. Several initiatives and the superb efforts of Force Master Chief William M. Griffith have already brought this effort a long way, but we have more to do to ensure that we train enough technicians, and then ensure that their training is fully and effectively utilized in direct health care delivery.
- Ensure all medical officers attend Officer Indoctrination School (OIS). Being a *naval* officer is a vital part of the medical officer's job. He or she should receive such military training to more readily carry out the professional role of naval officer.
- Develop and implement a formal command preparation "pipeline" to provide management training to prospective commanding officers, executive officers, and other senior leaders. Strengthening formal career development and training is one of the most important investments we can make to ensure the success of Navy medicine 10-20 years from now.
- Support expansion of Continuing Medical Education (CME) to enhance professional knowledge, quality, and satisfaction. For many providers CME is essential for certification and licensure.

10. Reserve Management

- Publish improved medical reserve training guidance to keep pace with growth in the fleet hospital program and efficiently use valuable assets.
- Increase medical reserve training opportunities within the Navy, with other services, in the Veterans Administration, and in civilian institutions. If we are to attract and retain good people in the Naval Reserve, we must find even more flexible and innovative ways to meet our mutual needs.

11. Operational Efficiencies

- Establish two fleet surgical teams per coast for routine amphibious deployments to avoid disrupting GME pro-

grams and shore-based health care delivery by continuing to use MMART's for that purpose.

- Modify the intervals between required routine physical exams for active duty personnel. We can improve in-house productivity and avoid CHAMPUS cost with no diminution in quality or standards by focusing the interval and extent of the examination board on age, occupation, risk factors, etc.
- Establish more family practice hospitals and implement focus counseling center programs. In so doing, we can enhance access and retention, and we can reduce CHAMPUS costs.
- Expand the Health Care Finder program to all medical facilities to help beneficiaries find reasonably priced quality health care in the private sector when Navy care is unavailable.

12. Medical Equipment

- Adopt turnkey medical equipment programs (including site preparation and training) to avoid delays in getting working systems to providers and patients who need them.
- Improve equipment maintenance.
- Upgrade maintenance training.

13. Billet and End Strength Requirements

- Support efforts to validate the Joint Service Medical Staffing Standards and improve Shore Manpower Documents (SHMD) for medical personnel.

14. Resources

- Fund all BRP initiatives.
- Monitor CHAMPUS costs and budget execution to ensure the best appropriate use of resources.

Many of the recommendations will require funding and additional manpower to implement. Navy leadership has agreed to make that investment. The initiatives all make good "business sense" by demonstrating a projected return on our investment.

The past year and a half has been a time of progress and change in the Navy Medical Department. The months and years ahead will nurture this trend. We must put behind us the old ways that work less well for the new ways which work better. Just as clinicians rapidly introduce changes in procedure in response to developing state-of-the-art medical knowledge and technique for the health of their patients, so too must we recognize management change as an essential element for the viability of our organization.

I will continue to keep you informed through *Navy Medicine* and other media of the results of these changes and how they will affect us all. I am more confident than ever that we will meet our many varied challenges and prevail. □

Dr. Zimble is Surgeon General of the Navy and Director of Naval Medicine.

Detachable Power Cords: A Potential Hazard to Patient Safety

An accidental electrocution of a patient in a Seattle hospital alerted the nursing staff of Naval Hospital, Bremerton to evaluate equipment currently utilized for patient care. In December 1986, at a neighboring civilian hospital, a child undergoing cardiac monitoring received a fatal charge of alternating current from a wall power outlet. This occurred when an electrical power cord for an electronic intravenous fluid pump became disconnected from the pump and then accidentally connected to single lead electrode cables attached to the patient's chest. This tragedy prompted CDR J. Smith, head of the inpatient nursing department, to contact the nursing quality assurance coordinator, LCDR W. Lukasik, to evaluate the potential for such an injury to occur at the Naval Hospital.

In conducting a survey of the hospital's present equipment inventory, a surprising discovery was made: two of the hospital's most recent equipment acquisitions, Critikon Dinamap SX1846 and the Ohmeda Pulse Oximeter Biox 3700, were found to have detachable power cords. Once detached, these power cords became, in effect, "extension cords" (Illustration A, "Before"). These "extension cords" could allow inadvertent connection of other electrical wiring or accidental entry of fluid while in use in patient care areas.

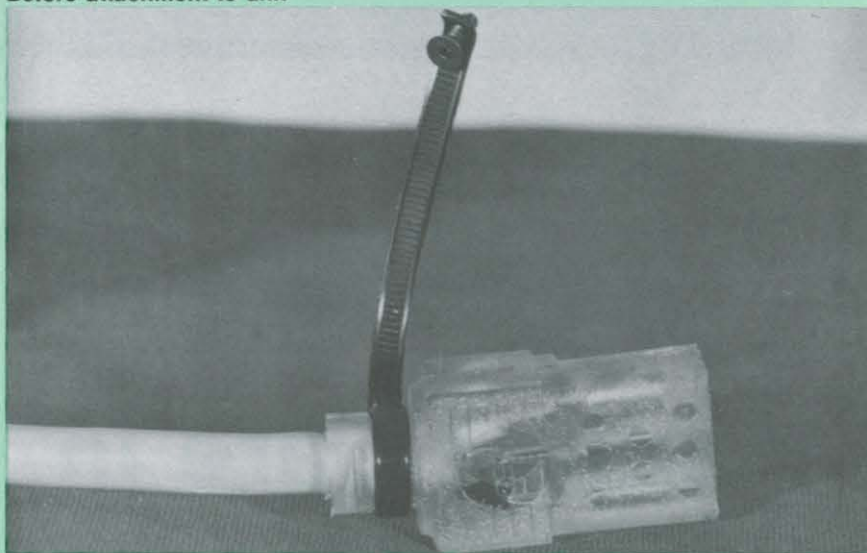
The biomedical repair department of the hospital modified both pieces of equipment by attaching a nylon wire tie between the power cord and the instrument housing, (Illustration B, "After"). As a result, the possibility of unplugging the power cord and accidentally reat-

taching it to an inappropriate source is eliminated. In addition to making the modifications on this equipment, the medical repair section now presents added content to their portion of the hospital's orientation program for new personnel. Based on this tragic accident and the measures taken to prevent a

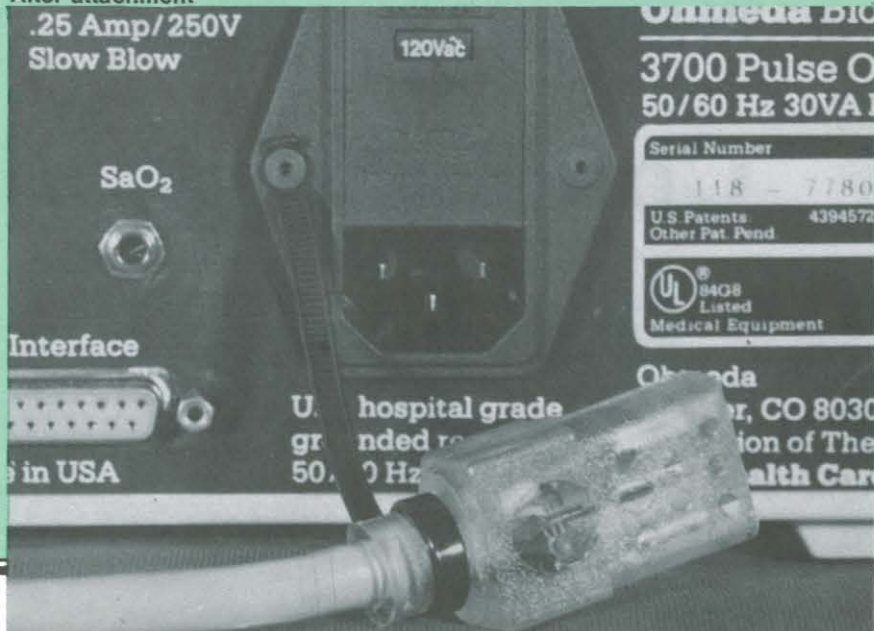
similar incident at Naval Hospital, Bremerton, the nursing directorate personnel are placing far greater emphasis on teaching content related to avoiding electrical hazards in the delivery of patient care.

—LCDR William Lukasik, NC, Naval Hospital, Bremerton, WA.

Before attachment to unit



After attachment





Improving Medical Care in Naval Mobile Construction Battalions

LT Dennis A. Ice, MC, USN

The Naval Mobile Construction Battalion, or Seabee Battalion, is a force with a multifaceted mission. In peacetime it trains via a rigorous homeport/deployment cycle. In homeport the battalion is involved in many military and construction training evolutions. Included here is a large field exercise (FEX) where contingency construction skills are put to the test in a simulated combat environment. When the battalion deploys it is split into a main body site and several smaller detachment sites. At all sites,



The battalion medical department organizes and administers influenza vaccinations.

construction projects are undertaken and completed to train personnel and to prepare the battalion for wartime construction tasking.

During wartime the tables turn and scenarios previously encountered in training become reality. In addition to contingency construction projects, i.e., rapid runway repair, positions must be defended against the enemy. This brings into play military skills learned during the FEX. Inherent is a great potential for physical injury, not only from construction accidents but from ballistics.

To this end Seabee battalions need medical officers and departments that are ready to assume the wartime role. A typical Seabee medical department includes a medical officer (MO), one or two independent duty corpsmen (one of whom is usually an HMC), and a variable number of HMI's, HM2's, and HM3's. The normal complement of HM's in a department is seven to nine. Their function in peacetime is simple: The physician and corpsmen are TAD to the clinic at the homeport Construction Battalion Center (CBC). While deployed they assume the same duties at the main body location. Here

the medical department supports the battalion's mission by providing many services. These include daily sick call, emergency care, specialty referral, immunizations, physical exams, and preventive medicine. The department "trys its wings" by functioning as a unit away from a clinic or hospital, but the role is fairly cut and dried. As long as the day-to-day routine is accomplished, everyone is content. All is well in peacetime.

But this feeling of well-being in time of tranquillity can lead to utter disaster on the field of battle. There, injuries will occur quickly and in great numbers. Chemical warfare is a likelihood, biological agents are a distinct possibility, and the nuclear threat is omnipresent. Bridges can't be built if Seabees die because of an inefficient casualty management system. Much loss of life will ensue unless improvements are made in the present medical system of the naval construction forces.

Changes must be effected *now*, not on the battlefield. Efficient casualty management should be standard operating procedure for a Seabee battalion in all phases of peacetime training. How may this be accomplished? By improvement in two broad categories—training and communication.

Training

The typical battalion MO is a young doctor, a recent medical school graduate (usually from a civilian medical school), just out of internship with no prior line military service. He arrives at the battalion completely foreign to the ways of the military, in rumpled greens and dull steel-toed boots. He

gets little or no break-in period with his predecessor and is told to "Start seeing patients. You'll catch on in time. In the meantime, the chief will carry the ball." As time goes on the new MO is introduced to facets of battalion life he had no idea existed: DMI's, after-action reports, FEX's, mount-outs, stand-downs, AOM's, TOA's, the .45 cal pistol—the list is endless. It usually takes a year to learn what these things mean and how they apply to medical. With 2-year operational tours now the norm for doctors, the Seabee MO has a year remaining with which to be effective.

FEX presents other dilemmas. The new doctor probably has had little knowledge of the operation of a battalion aid station and how it fits into the proper scheme of combat care facilities. Here the HMC usually provides the necessary instruction.

This may be adequate for a FEX, where casualties are simulated and communicable disease is nonexistent. But what if the battalion deploys to Central America in a contingency situation? Casualties will bleed very realistically, and malaria and yellow fever will try to take their toll. The FEX can only be so realistic.

What's the cure? Set up an orientation program at the CBC's especially for new MO's. Train them on the inner workings of a construction battalion. Explain their role in detail, and show what's expected of them in all roles. Integrate these roles so that one compliments the other. Send them to Field Medical School (FMS) for a few weeks to learn combat triage and medevac. If they haven't been to the C-4 course while interns, they should



Sanitation inspections are a vital preventive medicine function during deployment.



Seabee corpsman rendering aid to simulated casualty during FEX.

go prior to reporting to the Seabees. If all this were standard operating procedure the battalions would receive medical officers competent and raring to go from their first day aboard.

A physician so trained would become a more effective leader, passing his knowledge down to his corpsmen. The latter would, in turn, become more competent. In this way the medical department becomes a cohesive unit ready to give maximum support to the organization. Everyone in the battalion benefits in the long run.

Communication

Good communication between the MO and his fellow officers and between the medical department and the rest of the battalion is essential.

Casualty management must be planned and agreed on in advance of a field situation. Issues such as deployment of ambulances to the battle area, utilization of corpsmen, direction of litter-bearers, etc. should be planned early on. Radio or wire communication between corpsmen on the line and the aid station should be simple and efficient in order to provide timely

patient evacuation.

Good communication must be established *in advance* of a field situation. A smooth system is gained by planning well before, so that all actors know their parts. The other officers of the battalion are justifiably concerned with defending their perimeters, digging fighting holes, and dealing with aggressors. They are relying on the MO to have his plan firmly established by the time the first shot is fired.

Additional Considerations

A battalion MO needs to know his men and their medical problems in homeport and, because he may lose contact with many of these patients when they deploy to remote detachment sites, he should make at least one, and preferably two detachment site visits during the course of a given deployment. This ensures contact with the Seabees he is responsible for and allows for followup of patients.

On site visits can also provide the commanding officer with timely information on such problems as sanitation, disease vector control, and communicable disease outbreaks

before they balloon into major disasters.

The installation of an 0-4 or 0-5 level MO at the construction regimental level is also suggested. Currently, the most senior physician in the system is the 0-3 general medical officer. The Seabee physician often requires answers to questions about day-to-day medical department management. Presently, CBLANT has an 0-4 Medical Service Corps officer and a master chief corpsman on the command staff who are very effective sources of information in many areas. CBPAC should institute a similar system. Besides providing advice, such a contact could ensure standardization of training, medical TOA inventories, and manning for the varied departments on both the PAC and LANT sides.

By adopting these recommendations a common goal can be achieved. That goal is for all elements of the Seabee battalion to complete its war-time mission. □

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Suicide in the Naval Service

Part II: Incidence and Rate

CDR Douglas E. Dennett, MC, USNR

Accurate reporting of death by suicide is a necessary and difficult process underlying any program designed to study, prevent, or intervene in suicide. Department of Defense (DOD) and each of the armed services have been directed to develop new and more comprehensive programs for the prevention of suicide. This report reviews the literature on suicide in the Navy and Marine Corps and examines current suicide data bases.

Schuckit and Gunderson were the first to report naval service suicide epidemiology data in the medical literature.⁽¹⁾ Using data files from the Bureau of Medicine and Surgery they found 731 reported cases of completed suicide in the Navy and Marine Corps between July 1965 and January 1972 (Table 1). Chaffee⁽²⁾ using similar data files reported the annual inci-

dence and rate of suicide for males from 1966 to 1977 (Table 2).

The yearly variation in suicide incidence both by number and rate per 100,000 shows a wide range for both Navy and Marine Corps. While this variation could be a valid reflection of changes in the true rate of suicide, it is

also quite possible that the data reflect variations in the reliability of case identification. This latter situation was well demonstrated by Datel when he found significant discrepancies between two independent systems for collecting and recording Army suicides.⁽³⁾

TABLE 1
Suicides in the Naval Service, 1965-1972
Number and Rate Per 100,000

	Marine		Navy	
	No.	Rate	No.	Rate
Enlisted	353	16	311	8
Officer	20	14	47	9

SUICIDES BY DATA SOURCE

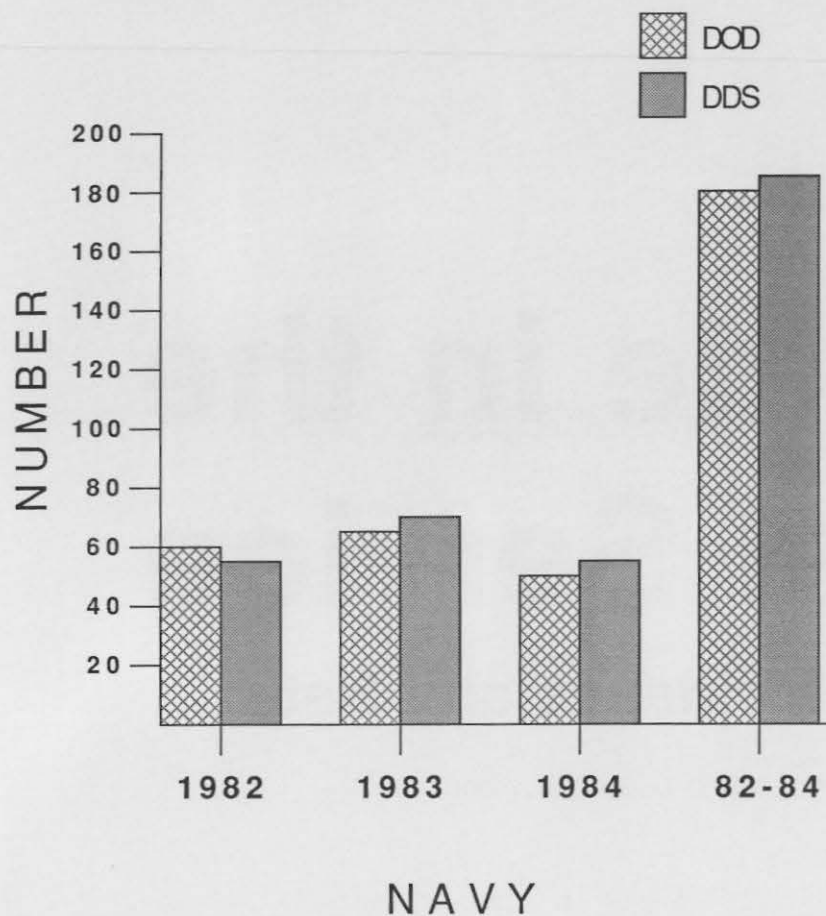


Figure 1

Comparison Study

In 1979-80, while working on a study of suicide demographics from line of duty (LOD) investigations(4) maintained by the Office of the Staff Judge Advocate, a statistician examined the integrity of the Death Data System (DDS) maintained by the Naval Medical Data Services Center.(5) The DDS is a file of all deaths of active duty members. Deaths are recorded from death certificates received from hospitals and other official authorities. Data is also obtained from the DOD Casualty Office when death is accidental or self-inflicted.

The DDS file was compared with the LOD file for confirmed suicides occurring in calendar year 1978 (Table 3). A significant variation was discovered between these two files, each approximately 30 percent incomplete when compared to the combined sample.

Subsequent to this study reports of suicides and accidents in the DDS for 1974-1978 were revised by using estimates based on the comparative study. The total number of self-inflicted deaths between 1974 and 1978 was estimated at 499, an increase of 168

TABLE 2
Male Suicides Reported From Naval Health Research Center
Number and Rate Per 100,000

Year	Navy		Marine	
	No.	Rate	No.	Rate
1966	44	6.07	41	16.29
1967	68	9.26	48	16.68
1968	60	8.04	34	11.10
1969	64	8.63	71	23.04
1970	56	8.28	38	14.38
1971	29	4.69	21	9.84
1972	17	2.91	33	16.74
1973	34	6.05	35	18.01
1974	45	8.26	28	14.70
1975	35	6.58	26	13.41
1976	40	7.67	24	12.54
1977	50	9.58	25	13.19

TABLE 3
Suicide in 1978 by Source of Data
Number and Rate Per 100,000

Source	Marine Enlisted No.	Marine Enlisted Rate	Navy Enlisted No.	Navy Enlisted Rate	Marine Officers No.	Marine Officers Rate	Navy Officers No.	Navy Officers Rate
DDS	23	13.3	36	7.8	1	5.4	0	0
LOD	16	9.2	47	10.1	0	0	3	4.8
Combined	29	16.7	58	12.5	1	5.4	3	4.8

over the 331 identified cases in the DDS.(5)

The DDS has continued to be the primary source of suicide statistics for the naval service. Since 1981 the coding of deaths by suicide and accident has been significantly improved. Data is now available for the period 1981-1984.(6) This data was compared with a new study of suicide conducted by DOD for all armed services for the years 1982-84(7) (Figures 1 and 2). The data shows a very high correlation between the two studies, and suggests that the DDS is now a reliable system and an excellent source for the ongoing systematic compilation and study of suicide data in the naval service.

Current Data

The recent DDS report(6) provides an excellent update of information on suicide in the Navy and Marine Corps. Numbers and rates of suicide are available by sex, age group, race, and rank (officer vs. enlisted).

Rates of suicide vary considerably within the naval service. Officers, females, and black males have relatively low rates of suicide (Table 4). The highest rates of suicide are found among young white enlisted males, (Figure 3). Both the Navy and Marine Corps are below the national average; however, the peak rate which occurs for the age group 25-29 clearly approaches the national average. The elevation of Marine Corps rates over the Navy rates seem quite stable across

age groups with a slightly greater variation above age 29.

Discussion

Suicide is the third leading cause of death in the naval service. From 1974

to 1978, 85 percent of all deaths were due to accidents, poisoning, or violence.(5) Most accidental deaths are due to land transport or air transport accidents, 40 percent and 11 percent, respectively. Self-inflicted deaths

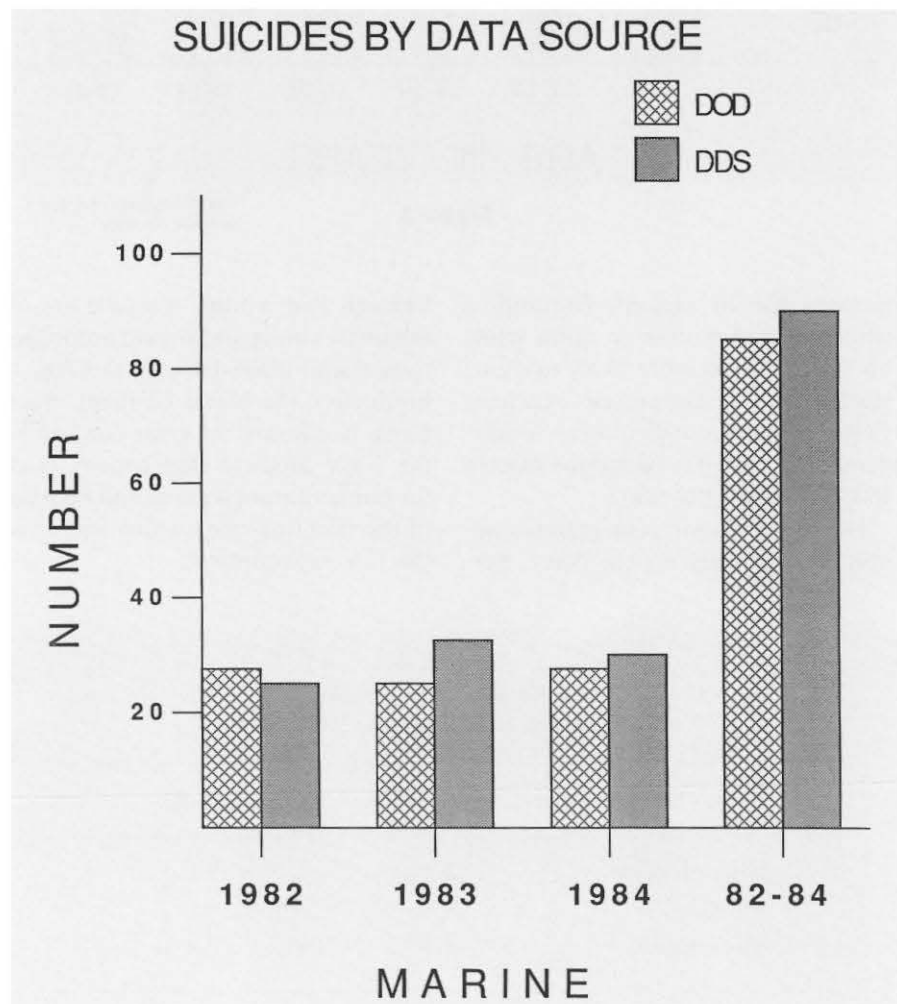


Figure 2

WHITE MALE SUICIDES 1981-1984

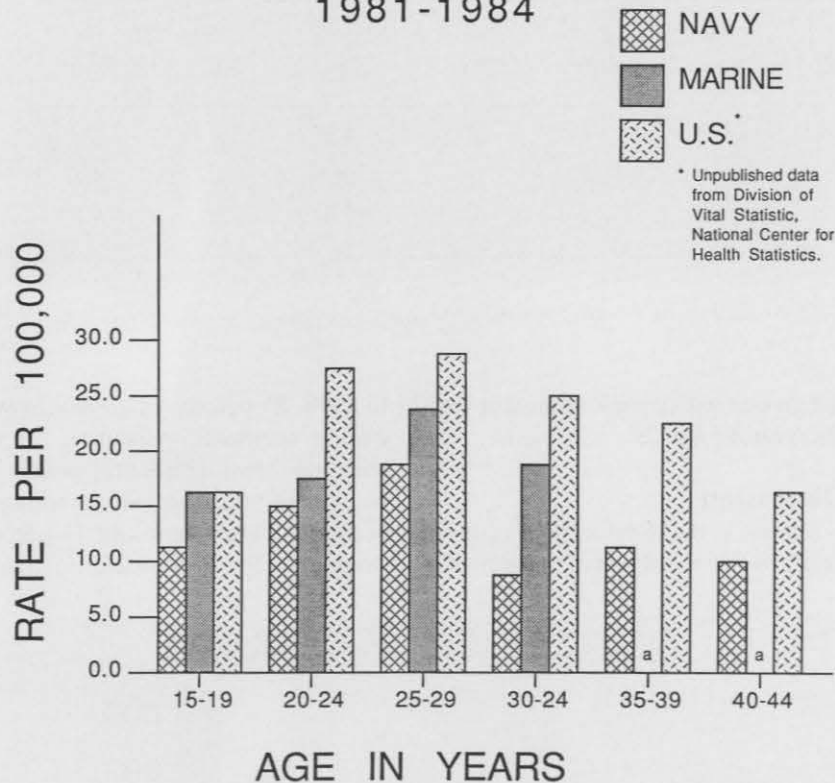


Figure 3

account for 10 percent. Of note, a white enlisted marine or sailor while on active duty is more likely to die of suicide than a motorcycle accident. Together, suicide and motorcycle accidents take the lives of approximately 180 individuals per year.

Death prevention is an understandably high priority for the Navy. Ser-

vicemen and women who die are all relatively young and should according to actuarial tables have many years of productive life ahead of them. Each death is a matter of great concern to the Navy Medical Department, both for humanitarian reasons and because of the resulting costs which accrue to the U.S. Government.

TABLE 4
Suicide Rate Per 100,000
From Death Data System, 1981-1984

	Navy	Marine
Male officers	8.1	8.1
All females	4.6	*
Black males	7.1	12.8

*Not calculated, N=2

It is a generally held view that many accidents can be prevented. It is also inescapably clear that preventing accidents is an extraordinarily difficult task. Because 85 percent of all deaths in the naval service are the result of accidents and not disease, serious efforts to prevent accidents are most important.

Summary

Suicides are a significant and crucial part of accidental deaths, and accidental death is often closely tied to suicide. Analysis of these problems continues to be critical. Creative programs and new resources are always desperately needed and welcomed. This report has reviewed the current status of monitoring the incidence of suicide in the naval service. Considerable improvement has been made in this regard. Present data strongly suggests that suicide prevention remains a timely and important issue for both the naval medical and line communities.

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To the Editor

Our article in the September-October 1988 issue of *Navy Medicine* entitled "Fire at Sea: Critical Burn Management Considerations in Small Deployed Surface Combatant" requires two additional comments.

(1) Just as a carpenter measures the perpendicularity of a joint by measuring it against a square, or the verticality of a beam by use of a plumb, we too endeavored to define the appropriateness of our protocol recommendations by utilizing an equally legitimate authority. We would like to gratefully acknowledge the editorial advice and guidance, in preparation of the protocol, of COL Basil A. Pruitt, MC, USA. Dr. Pruitt is Commander and Director of the U.S. Army Institute of Surgical Research at Fort Sam Houston, TX.

(2) The last portion of the protocol should be appropriately labeled "Evacuation Considerations," rather than Evaluation Considerations.

CAPT A.M. Smith, MC, USNR
HMI(SW) D. Wilson, USNR (TAR)

Surgeon General Sitreps

There are currently five "Grand Rounds With the Surgeon General" video sitreps in distribution to Biomedical Communication Centers (BCC) intended for showing to Medical Department personnel throughout the world. These tapes, which are an hour or shorter in duration and provided in 3/4" Betamatic format, are live and unrehearsed interviews with VADM James A. Zimble, MC, Surgeon General of the Navy.

Each tape treats major Medical Department and medical community issues. Commanding officers are asked to ensure that copies of each "Grand Rounds" tape are obtained and shown at all medical and dental facilities. If there are any problems in obtaining tapes from BCC's, requests for copies, including a 1-hour 3/4" videotape on which to dub each title, should be sent to:

Naval School of Health Sciences
Biomedical Communication Center
ATTN: Mrs. Rose Prakas
Bethesda, MD 20814-5033

Following is a list of current titles available which are being distributed to the field:

- All Medical Department Personnel (804175DN)
- Medical Corps Issues (804217DN)
- Enlisted Medical Department Issues (804221DN)
- Innovation in the Medical Department (804242DN)
- Nurse Corps Issues (804218DN)

Navy Anesthesia Association

A Navy Anesthesia Association is being formed. The association will be composed of individuals who are currently or have been Navy anesthesia providers. This is a nongovernmental group which will provide a vehicle for the exchange of ideas and information within the Navy anesthesia community. These would include:

- Practical and historical perspectives from our retired and civilian colleagues who have faced problems in military logistics and clinical practice that may be faced again.
- Support for educational/research efforts in operational or civilian mass casualty missions.
- A way to contact anyone who has or is serving in Navy anesthesia departments.
- An opportunity to renew old friendships.
- An opportunity to support Navy training programs.

The first organizational meeting was held in September 1988 during the Dannemiller Memorial Educational Foundation's Navy Anesthesia Symposium in Norfolk, VA. Those persons interested in obtaining additional information about the Navy Anesthesia Association should contact:

CAPT James F. Meyer, MC, USNR
2303 Deets Road, R.R. #3
Sterling, IL 61081

NOTAP

A Navy Occupational Task Analysis Program (NOTAP) survey and analysis of the HM rating is currently being conducted by the Navy Occupational Development and Analysis Center (NODAC) in accordance with MILPERSMAN article 1450100. Upon completion of the survey, data obtained and analyzed will be used to update occupational standards (NAVPERS 18068E), Personnel Advancement Requirements (PARS), rate training manuals, training curricula, and rating advancement examinations.

Areas with the greatest concentration and cross section of HM's by population and certain NEC's will be surveyed. This includes naval hospitals, naval medical clinics, branch clinics, ships, and FMF units. Approximately 8,000 HM's will be surveyed. Once these survey booklets are mailed to your command, your full cooperation and assistance are necessary to ensure the success of this survey.

Point of contact for this project at NODAC is RMC Rivera. Telephone: Autovon 288-4498, Commercial (202) 433-4498. Point of contact at Naval Medical Command is HMCM Fejes. Telephone: Autovon 294-1651, Commercial (202) 653-1651.

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***Navy Medicine* Seeks Articles and Photos**

Navy Medicine is seeking articles of widespread interest to all or part of the Navy Medical Department for future issues from readers. As you know, our magazine's constituency and our range of contributors cover the waterfront—physicians, dentists, nurses, MSC officers, corpsmen, dental techs, physician's assistants, and civilian staff.

Over the years we have always encouraged our readers to submit articles in the areas of their expertise or experience, and have grown to rely on our "eyes" in the field and in the fleet to report current news, professional developments, and commentary on medically-related subjects, clinical and otherwise.

Timely, well-written, and well-illustrated stories of broad interest are strong candidates for publication. As you undertake new or improved procedures, or practice unique and interesting medicine, share your work and experience with your colleagues and get the reward of published professional visibility by writing an article.

Editorial Guidelines

Text

Submissions should be typed and double-spaced from 1,000 to 2,000 words (two copies). Please be sure to include the full name, rank, and affiliation of author or authors, and a contact telephone number and military address.

Illustrations

Photos should, wherever possible, be 8" x 10" black and white, captioned, and with the photographer noted for credit purposes. Quality photography is essential. Snapshot photos, polaroids, or those not properly focused and exposed cannot be used. Exceptional photos related to any aspect of Navy/ Marine Corps medical practice are always in demand for cover use. No color slides or large transparencies please.

Tables and figures should be fully marked and camera-ready. References must be properly footnoted, and the manuscript should have a bibliography if outside sources were used. For the proper format, consult a recent copy of *Navy Medicine* or request a copy from us.

Deadlines for articles submitted in 1989 are:

For the May-June issue	1 March
July-August	1 May
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